For CIC Consideration

April 5, 2002 request received:

Simultaneous evaluation of all the statins by the CIC.

Status of Lovastatin

February 1999

- prioritized as "high" carcinogenicity concern
- selected for preparation of hazard identification document
- Request for Relevant Data CRNR
 Today
- Draft in preparation

Status of other statins

Statins, including Pravastatin Sodium, Simvastatin, Fluvastatin Sodium, Atorvastatin Calcium, Cerivastatin Sodium

Not yet selected for prioritization

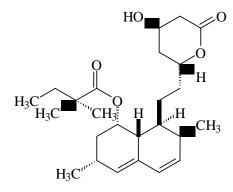
Statins: Widely prescribed drugs with lipid-lowering effects

- Inhibit HMG-CoA reductase, an early ratelimiting step in cholesterol biosynthesis.
- Reduce total cholesterol, LDL cholesterol, apolipoprotein B, triglyceride levels
- Increase HDL cholesterol

Lovastatin

Pravastatin sodium

Atorvastatin calcium



Simvastatin

Fluvastatin sodium

$$H_3C$$
 H_3C
 H_3C
 H_3C
 H_4COH_3C
 $HO^{"}$
 H
 H
 H
 H
 H

Cerivastatin sodium

Statins and Tumors in Animals, as reported in U.S. FDA-approved product labels

	Atorva-	Ceriva-	Fluva-	Lova-	Prava-	Simva-
Liver	FM, MM	FM, MM		FM, MM	MR	FM, MM
				MR	MM, FM	MR, FR
Thyroid			MR	R		FR
Lung				FM	FM	FM, MM
Fore- stomach			FM, MM	FM		
Harderian Gland						FM, MM
Muscle	FR					

Summary

- OEHHA currently completing HID on lovastatin
- Widespread, long-term exposure to statins
- Structural, pharmacologic, and toxicologic similarities
 - Multiple tumor sites in common
- Common mechanism of carcinogenicity likely